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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,004	11/14/2003	Stuart A. Kushon	8971-035-27	7816

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09/09/2005

Supervisor, Patent Prosecution Services
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EXAMINER

VENCI, DAVID J

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,004

Applicant(s)

KUSHON ET AL.

Examiner

David J. Venci

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 13, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-57 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15 and 54, drawn to methods of making a sensor, classified in class 548/304.1, for example.
- II. Claims 16-32, 52 and 55, drawn to sensors, classified in class 436/172, for example.
- III. Claims 33-39, 43-48 and 53, drawn to methods for detecting analyte, classified in class 435/7.5, for example.
- IV. Claims 40-42 and 56-57, drawn to sensing systems, classified in class 436/532, for example.
- V. Claim 49, drawn to a sensor, classified in class 435/DIG. 4, for example.
- VI. Claims 50-51, drawn to methods for detecting analyte, classified in class 435/5, for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, III and VI are independent and patentably distinct from each other. Inventions are independent and patentably distinct if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions modes of operations. For example, Invention I requires the step of combining a polymer and a protein, which is not required in Inventions III and VI. Invention III requires the step of combining a sample and a bioconjugate, which is not required in Inventions I and VI. Invention VI requires the step of incubating a sample and a bacterial spore or virus, which is not required in Inventions I and III.

Inventions II and IV are related as subcombination and combination, respectively. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed

Art Unit: 1641

does not require the particulars of the subcombination as claimed because a solid support has separate patentable utility as a drug target, for example. The subcombination has separate utility in a system for drug delivery to biotinylated tissue, for example.

Inventions II and V are independent and patentably distinct from each other because Inventions II and V have different inventions modes of operations. For example, Invention II requires a biotin binding protein, which is not required in Invention V. Invention V requires a spore or virus, which are not required in Invention II.

Inventions IV and V are independent and patentably distinct from each other because Inventions IV and V have different inventions modes of operations. For example, Invention IV requires a sensor comprising a tether, which is not required in Invention V. Invention V requires a spore or virus, which are not required in Invention IV.

Inventions I and (II, IV or V) are related as process of making and products made, respectively. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed can be used to make a materially different product, such as a drug delivery system.

Inventions (II, IV or V) and (III or VI) are related as products and processes of use, respectively. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the products as claimed can be used in a materially different process, such as a drug delivery system.

Art Unit: 1641

This application contains claims directed to the following patentably distinct species of the claimed invention:

Select ONE quencher structure from claims 14, 15 and 21

Applicant is required under 35 U.S.C. 121 to elect a single disclosed quencher structure species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held allowable. Currently, claims 1 and 16 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because the aforementioned Inventions and structure species are distinct for the reasons given above and the scope of the prior art searches required for each of the aforementioned Inventions and structure species do not appear coextensive, restriction for examination purposes as indicated is proper.

Art Unit: 1641

A telephone call was made to Applicants' representative on July 14, 2005, to request an oral election to the above restriction requirement, but did not result in an election being made. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Specification

A preliminary examination of this application reveals that the specification and claims include symbology that is different from that which is generally accepted in the art to which this invention pertains, such that a proper search of the prior art cannot be made. Specifically, on pp. 13 and 33 of the specification, and claim 5, the depicted chemical structures of polyphenylene ethynylene contain intersecting vertical lines. In addition, said chemical structures recite the text "1/4" and "3/4". It is not clear what information is conveyed by said intersecting vertical lines and the text "1/4" and "3/4".

Applicant is required to provide a clarification of these matters or correlation with art-accepted terminology so that a proper comparison with the prior art can be made. Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

Art Unit: 1641

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Venci whose telephone number is 571-272-2879. The examiner can normally be reached on 08:00 - 16:30 (EST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

David J Venci
Examiner
Art Unit 1641

djv



LONG V. LE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

02/06/05